Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-13. (Cancelled)

14. (Currently Amended) A method of communicating consecutive frames of digital data, said method comprising the steps of:

mapping payload data into complex symbols;

interspersing appropriate pilot symbols; and,

mapping symbols on respective sub-channels;

whereby the insertion of a given pilot configuration into the stream of payload data will give rise to a specific output signal being associated with a given PAPR value;

wherein the digital data comprises OFDM modulated signals comprising a first plurality of payload carrying sub-channels and a second plurality of pilot carrying sub channels;

wherein each individual frame of payload data to be transmitted over the payload channels is associated with a given unique pilot configuration chosen from a sub-set of predetermined pilot configurations, each pilot configuration forming a unique pattern of predetermined pilot symbols and transmitted;

wherein, prior to the transmission of at least one given frame of payload data, each pilot configuration of the sub-set is evaluated with regard to PAPR for the associated frame of payload data, whereby the pilot configuration being associated with the lowest PAPR value is chosen for transmission; and,

wherein a control word indicative of the pilot configuration associated with a subsequent frame or a particular frame of a subsequent given order number is inserted into the frame and coded on a predetermined payload ~~channel.~~ channel;

wherein for every frame in a frame period of a first number of frames, a complete frame comprising both payload data and the control word is optimized with regard to PAPR and wherein a default pilot configuration is utilized for a frame in the frame period.

15.   (Previously Presented)   The method according to claim 14, wherein the plurality of pilot configurations represent block codes allowing error correction at the receiver.

16-18.(Cancelled)

19.   (Previously Presented)   The method according to claim 14, wherein, the sub-carriers carrying the pilot signals are digitally modulated at a lower order (BPSK) than sub-carriers carrying the payload data (QAM).

20.   (Previously Presented)   The method according to claim 15, wherein the block code forming pilot configurations have a hamming distance of ≥ 3.

21.   (Previously Presented)   The method according to claim 14, wherein the sub-channels are modulated by BPSK or n-QAM modulation.

22.   (Currently Amended)   A transmitter comprising:
a mapping stage, mapping payload data on a subset of a plurality of frequency orthogonal sub-carriers;
a plurality of parallel-coupled pilot insertion stages coupled to the mapping stage, each pilot insertion stage inserting a unique pilot configuration on at least another subset of sub-carriers;
a respective inverse fast Fourier transmission stage processing signals from each respective pilot insertion stage;

a PAPR measuring and pilot decision stage, measuring and evaluating PAPR for each unique pilot configuration;

wherein, each individual frame of payload data to be transmitted over the payload channels is associated with a given unique pilot configuration chosen from a sub-set of predetermined pilot configurations, each pilot configuration forming a unique pattern of predetermined pilot symbols, and transmitted;

wherein, prior to the transmission of at least one given frame of payload data, each pilot configuration of the sub-set is evaluated with regard to PAPR for the associated frame of payload data, whereby the pilot configuration associated with the lowest PAPR value is chosen for transmission; and,

said transmitter further comprising a control word insertion stage for inserting a control word in a transmitted frame, the control word being indicative of the pilot configuration used in a frame of any given subsequent order number. number;

wherein for every frame in a frame period of a first number of frames, a complete frame comprising both payload data and the control word is optimized with regard to PAPR and wherein a default pilot configuration is utilized for a frame in the frame period.

23.   (Previously Presented)   The transmitter according to claim 22, wherein each unique pilot configuration has a hamming distance of at least three to any other pilot configuration.

24-26. (Cancelled)

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